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October 21, 2002

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Marlene H. Dortch, Secretary
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

Re: Review of the Section 251 Unbundling Obligations of Incumbent Local
Exchange Carriers –
CC Docket No. 01-338
Implementation of the Local Competition Provisions in the
Telecommunications Act of 1996
CC Docket No. 96-98
Deployment of Wireline Services Offering Advanced Telecommunications
Capability –
CC Docket No. 98-147

Dear Ms. Dortch:

Pursuant to Section 1.1206 (b)(1) of the Commission's rules, Eschelon Telecom submits the attached written *ex parte* in the above-captioned docketed proceedings. This submission provides more detail to the discussion held on October 2, 2002 between representatives of Eschelon Telecom, Broadview Networks and Talk America and the staff the Wireline Competition Bureau of the Federal Communications Commission. At that meeting, the FCC staff raised the issue of using DSO enhanced extended loops (EELs) as a possible option in the provisioning of local services to the mass market. This written *ex parte* is hereby submitted to further detail the technical and economic limitations of such a proposal.

I have been Eschelon's Executive Vice President of Engineering and Operations since May 1999. Eschelon has six voice switches and 12 data switches. We serve over 35,000 small business customers with over 130,000 access lines in seven states. We have built over one hundred collocations and we purchase unbundled loops to serve the majority of our customers. However, it has not been economically rational for us to build collocations to ubiquitously serve our markets because not every wire center contains sufficient numbers of small businesses to justify the investment in facilities. Many of our customers have multiple locations and for those

locations that we cannot serve via an unbundled loop, we use the unbundled network element platform (UNE-P). The staff questioned whether, given that we had collocations in some of our locations, could we not then use DSO EELs rather than UNE-P to serve such end users?

First let me describe how EEL service is provided. To deliver an EEL at the Voice grade-DSO (VGDSO) level, the ILEC must install a DS1 channel bank at each end of the transport circuit. Then, customer loops (up to 24 per DS1) are cross connected from the MDF (Main Distribution Frame) to the channel bank in the LSO (Local Serving Office). A DS1 circuit then is assigned/delivered from the LSO to the another LSO, where the CLEC has collocated analog line equipment, which is typically a digital loop carrier. The DS1 circuit would need to be terminated into another channel bank to "demultiplex" the DS1 back into the 24 individual lines, so that the service can be connected to the CLEC line card in the collocation site. Each VGDSO line will require as many as 3-4 jumpers in 2 separate LSO's.

Use of such VGDSO EELs will generate several significant problems in the provision of service as outlined below:

- 1). **COMPLEX CUTOVERS** - In order to accomplish service delivery with this method, multiple cross connect links have to be established. Eschelon and many other CLEC's utilize hot cuts of existing customer loops when providing service via UNE-Loops from our physical collocation sites. This only requires 2 jumpers to be changed per line (at the MDF and at the ICDF-spot bay). Our current experience is that disruptions in service already occur when hot cuts of unbundled loops only require 2 cross connect tasks to occur simultaneously. Disruptions would increase as the multiple links of an EEL, need to be cross connected. Imagine the coordination problems with trying to simultaneously cross connecting 3-4 separate cross-connect jumpers in 2 different central offices.
- 2). **RECORDS MANAGEMENT** - Given that each customer loop is then comprised of at least 4 separate component parts before it even attaches to CLEC equipment, it is imperative that ILEC records be accurate and up to date. Typical ILEC OSS and records management of all these "moving parts" will only exacerbate the problems of locating facilities and performing high quality cutovers.
- 3). **TROUBLESHOOTING & REPAIR** - In Eschelon's experience, the most common source of service outages and problems involve circuit failures at ILEC cross connection points. We would expect service interruptions with EEL circuits would occur more frequently than with UNE-P service because service via the EEL will always contain more cross connects. While trouble incidents would increase due to the multiple cross connect points associated with the VGDSO EELs, our ability to isolate and repair troubles would decrease because Eschelon would not have remote test access to cross connect points in ILEC facilities. Nor could Eschelon isolate a trouble to a particular ILEC cross connection point.

Conversely, Eschelon can test both DSI and analog lines served on our switch facilities today. Eschelon deploys test heads in its collocation cages to test standard voice grade POIS loops as well as DSI capable loops.

4). **INEFFICIENT & IMPRACTICAL NETWORK COST** - To the extent that the recurring and non-recurring costs of DSO EELs exceed the price of UNE-P less the switch port and usage charge, the EEL proposal does not offer an economically practical alternative to UNE-P.

Standard EEL pricing observed by Eschelon in Colorado for example is:

EEL DS1 multiplexing - \$156.81 (2 would be needed).

EEL DSO transport - \$15.90 / mo. fixed + 11 cents per mile / mo.

EEL DSO 2 wire loop - \$5.91/mo.

TOTAL per DSO EEL LINE = \$5.91+\$16.01+\$156.81*2/24 = \$34.99 + CLEC costs for backhaul to switch + switch port capital + interconnection trunking.

Standard UNE-P pricing observed by Eschelon in Colorado for example is:

Switch Port - \$1.53

Local switching usage - \$.00069/MOU

Local transport usage - \$.00111/MOU

DSO 2 wire loop - \$5.91/mo.

TOTAL per UNE-P LINE = \$5.91+\$1.33+\$1.53 = \$8.77 (assumes 525 local MOU & 363 LD MOU)

Further, although the signals are multiplexed for transport, multiplexing devices do not permit concentration of signals. Whereas the traffic from a CLEC's collocated DLC can be concentrated into fewer channels for transport, for example, Eschelon uses a 4::1 concentration ratio for lines to transport channels, multiplexing units do not have concentration capabilities. Thus the economies from aggregating DSO EELS are limited.

5). **PRACTICAL REALITIES OF SERVING CUSTOMER LOOPS** - Finally, the multiplexing gear that is to be connected to the customer loop is typically limited in its ability to drive any significant loop lengths. Although multiplexing equipment from different manufacturers may vary their ability to serve various loop lengths, in my experience, loop lengths in excess of 12,000 feet (2 mi.) could not be driven from standard multiplexing gear. This leaves a large portion of the customer base unable to be served by the DSO EEL methodology.

As a person with many years experience in operating and planning telecommunications networks, I can assure you that no telecommunications engineer would recommend developing a network using DSO EELS. It does not make technical sense to devise circuits so as to increase the numbers of cross connections while simultaneously decreasing our ability to test and repair them. I will most certainly recommend to my company that we decline to serve customers rather than utilize this methodology.

Marlene H. Dortch. Secretary

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Pursuant to Section 1.1206(b)(1) of the Commission's rules, an original and one copy of this letter are being submitted to the Office of the Secretary. Please associate this notification the record in the proceedings indicated above. If you have any questions concerning this matter, please call me (612) 376-4400.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "David A. Kunde". The signature is fluid and cursive, with a large initial "D" and "K".

David A. Kunde.
Executive Vice President of Network Operations
Eschelon Telecom, Inc.

CC:

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